

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please ~~AMEND~~ claims 1-2, 4-12 and 14-15 and ADD new claims 16-23 in accordance with the following:

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1. (~~CURRENTLY AMENDED~~) A device for checking user identification, comprising:
a calculation unit which calculates a check value by applying a user-specific formula to at least one randomly generated number; and
a matching unit which checks if the check value matches a user-entered value that is entered by a user in response to said at least one randomly generated number being presented to the user.
2. (~~CURRENTLY AMENDED~~) The device as claimed in claim 1, wherein said calculation unit outputs a fixed number₁ as the check value₁ if the user-specific formula consists of the fixed number.
3. (~~ORIGINAL~~) The device as claimed in claim 1, wherein the user-specific formula includes a variable that is an indication of a time at which said calculation unit calculates the check value.
4. (~~CURRENTLY AMENDED~~) The device as claimed in claim 1, further comprising:
a control-data unit which stores therein user IDs and user-specific formulas associated with respective user IDs;
a selection unit which selects one of the user-specific formulas₂ from said control-data unit in response to a user ID of said user; and
a random-number generating unit which generates said at least one randomly generated number.

5. (CURRENTLY AMENDED) The device as claimed in claim 4, further comprising a registration/updating unit which updates one of the user-specific formulas in the ~~control-data~~ control-data unit with a user-entered formula only if ~~a~~ the user entering the user-entered formula proves knowledge of said one of the user-specific formulas by entering said one of the user-specific formulas.

6. (CURRENTLY AMENDED) A method of checking user identification, comprising ~~the steps of:~~

calculating a check value by applying a user-specific formula to at least one randomly generated number; and

checking if the check value matches a user-entered value that is entered by a user in response to said at least one randomly generated number being presented to the user.

7. (CURRENTLY AMENDED) The method as claimed in claim 6, wherein said ~~step of calculating a~~ of the check value ~~comprises outputs~~ outputting a fixed number₁ as the check value₁ if the user-specific formula consists of the fixed number.

8. (CURRENTLY AMENDED) The method as claimed in claim 6, wherein the user-specific formula includes a variable that is an indication of a time at which said ~~step of calculating a~~ of the check value calculates the check value.

9. (CURRENTLY AMENDED) The method as claimed in claim 6, further comprising ~~the steps of:~~

storing user IDs and user-specific formulas associated with respective user IDs in a data storage;

selecting one of the user-specific formulas from the data storage in response to a user ID of said ~~the~~ user; and

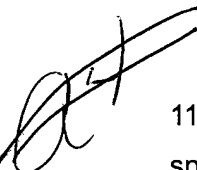
generating said at least one randomly generated number.

10. (CURRENTLY AMENDED) The method as claimed in claim 9, further comprising ~~a step of~~ updating one of the user-specific formulas in the data storage with a user-entered formula only if ~~a~~ the user entering the user-entered formula proves a knowledge of said one of the user-specific formulas by entering said one of the user-specific formulas.

11. (CURRENTLY AMENDED) A computer-readable medium having a program embodied therein ~~for causing to cause~~ to cause a computer to check user identification, said program comprising:

a calculation code unit which calculates a check value by applying a user-specific formula to at least one randomly generated number; and

a matching code unit which checks if the check value matches a user-entered value that is entered by a user in response to said at least one randomly generated number being presented to the user.

 12. (CURRENTLY AMENDED) The computer-readable medium as claimed in claim 11, wherein said calculation code unit outputs a fixed number₁ as the check value₁ if the user-specific formula consists of the fixed number.

13. (ORIGINAL) The computer-readable medium as claimed in claim 11, wherein the user-specific formula includes a variable that is an indication of a time at which said calculation code unit calculates the check value.

14. (CURRENTLY AMENDED) The computer-readable medium as claimed in claim 11, wherein said program further comprises:

a registration/updating code unit which stores user IDs and user-specific formulas associated with respective user IDs in a data storage;

a selection code unit which selects one of the user-specific formulas from said data storage in response to a user ID of said user; and

a random-number generating code unit which generates said at least one randomly generated number.

15. (CURRENTLY AMENDED) The computer-readable medium as claimed in claim 14, wherein said registration/updating code unit updates one of the user-specific formulas in the data storage with a user-entered formula only if ~~a~~ the user entering the user-entered formula proves a knowledge of said one of the user-specific formulas by entering said one of the user-specific formulas.

16. (NEW) The apparatus as claimed in claim 1, wherein when the user enters a wrong user-entered value, the user is allowed to enter a new user-entered value in response to at least one new randomly generated number being presented to the user.

17. (NEW) The method as claimed in claim 6, wherein when the user enters a wrong user-entered value, the user is allowed to enter a new user-entered value in response to at least one new randomly generated number being presented to the user.

18. (NEW) The computer-readable medium as claimed in claim 11, wherein when the user enters a wrong user-entered value, the user is allowed to enter a new user-entered value in response to at least one new randomly generated number being presented to the user.

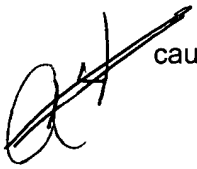
19. (NEW) A device for checking user identification, comprising:
a calculation unit which calculates a check value by applying a user-specific formula to a randomly generated number;
a terminal unit to present the randomly generated number to a user and to input a user-entered value responsive to the randomly generated number being presented to the user; and
a matching unit which checks if the check value matches the user-entered value.

20. (NEW) The device as claimed in claim 19, wherein said calculation unit outputs a fixed number as the check value if the user-specific formula includes the fixed number.

21. (NEW) A method of checking user identification, comprising:
generating a randomly generated number;
calculating a check value by applying a user-specific formula to the randomly generated number;
presenting the randomly generated number to a user;
inputting a user-entered value responsive to the randomly generated number being presented to the user; and
checking if the check value matches the user-entered value.

22. (NEW) The method as claimed in claim 22, wherein said calculating of the check value comprises outputting a fixed number as the check value if the user-specific formula

includes the fixed number.

 23. (NEW) A computer-readable medium having a program embodied therein to cause a computer to check user identification by:

- generating a randomly generated number;
- calculating a check value by applying a user-specific formula to the randomly generated number;
- presenting the randomly generated number to a user;
- inputting a user-entered value responsive to the randomly generated number being presented to the user; and
- checking if the check value matches the user-entered value.
